ABSTRACT

The present invention relates to a manufacturing method of a piston for a swash plate type compressor with variable capacity. More particularly, the present invention relates to a manufacturing method of a piston for a swash plate type compressor with variable capacity, which manufacture a piston from two piston members through friction stir welding without forming any hole in welded portions of the piston members, thereby improving durability of the welded portions and easily manufacturing a piston regardless of the size of the outer diameter of the piston members.

A method of the present invention includes the step of; temporarily coupling the first and second piston members formed respectively; loading the first and second piston members on the support rollers lifted and lowered elastically by elastic spring ; position controlling of the central axis line of the first and second piston members to that of the first and second supporting parts; rotatably supporting the first and second piston members on the first and second supporting parts; friction stir welding by rotating the rotation supporting means after a welding means is inserted to a welding portion with rotation; moving the welding means inserted to the welded poison to the predetermined position; and separating the welding means from the welded portion.